**Al-Imam Mohammad Ibn Saud Islamic University**

**College of Computer and Information Sciences**

**Computer Science Department**

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| **Course Title** | Machine Learning |
| **Course Code** | CS364 |
| **Course Instructor** | Prof. Hachemi BinNaceur and Dr. Wojdan BinSaeedan |
| Programming Assignment 1 | |
| Groups | |
| Due date: 26/02/2022 at 11:59 PM | |

**Goal:**

**Implementing the decision trees for classifying heart disease.**

**Note:**

**You may refer to Kaggle site for more practices and examples**

**Description:**

**Write a program that uses the decision trees for classifying heart disease. It should use the heart dataset, which has been provided with this assignment, to train and test the model. It should deal with the overfitting issue. Moreover, the program has to visualize the decision tree and print the confusion matrix.**

**Submission:**

**Submit the code of the solution that runs on Jupyter Notebook.**

**Good luck!**